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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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S.C. JOHNSON & SON, INC. 1525 HOWE STREET RACINE, WI 53403-2236			BALSIS, SHAY L	
			ART UNIT	PAPER NUMBER

1744

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/723,074

Applicant(s)

LONG ET AL.

Examiner

Shay L. Balsis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-19, 30 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-19, 30-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

The indicated allowability of claims 30-31 is withdrawn in view of the reconsidered claim language. Rejections based on new matter issues follow.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 30-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Upon further consideration claim 30 includes the limitation of a “non-circular” orbital body, however there is not support for this limitation in the original disclosure. The original disclosure only has support for an “elliptical orbital body.” The claim language is broader than the original disclosure since the claim could be interpreted to read on more than just “rounded like an egg” (dictionary.com definition of elliptical). Applicant is asked to show where there is support for “non-circular” in the disclosure or to amend the claim accordingly.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (USPN 2590913) in view of Zafiroglu (USPN 4820435), Zayas (USPN 5493749) and Blaustein et al. (USPN 6725490).**

With regards to claim 1, Adams teaches a portable powered cleaning device comprising a housing (12) and motor (26) mounted in the housing. The motor comprises a drive shaft (36), which is coupled to a carrier (40). The carrier reciprocates with respect to the housing when the drive shaft is moved. There is a cleaning attachment (52) removably attached to the carrier and recesses filled with surface treatment (56) located between the cleaning attachment and the carrier.

With regards to claim 10, the cleaning attachment is made from rubber (col. 2, lines 29-30).

With regards to claims 11 and 12, the surface treatment composition is in liquid, gel or paste form and can be used to clean or polish (col. 2, lines 33-39).

With regards to claim 13, the surface treatment comprises surfactants (detergent) (col. 2, lines 33-39).

Adams teaches all the essential elements of the claimed invention however fails to teach that the surface treatment composition is located in a separate packet and also that the cleaning attachment is attached to the carrier by a hook and loop fastener connection (claim 1). Adams also fails to teach that the carrier reciprocates between 3,000 and 10,000 cycles per minute (claim 8) and that the cleaning attachment is triangular (claim 1 and 8).

Zafiroglu teaches liquid dispensing packets containing liquid concentrate which can be placed insides sponges, or within an outer net fabric, or within an abrasive outer fabric (col. 3, lines 13-15) (claim 1). Zayas teaches a cleaning device which comprises a cleaning attachment attached to a carrier by many fastening means such as clips, snaps or hook and loop material (col. 3, lines 29-32) (claim 1). Blaustein teaches a cleaning element with a cleaning attachment that reciprocates at 6,000 cycles per minute (col. 4, line 5) (claim 1 and 8).

It would have been obvious to replace the recesses filled with the surface treatment composition at taught by Adams with the water dissolvable liquid dispensing packets of Zafiroglu since it would be easier to refill the hand held scrubber when more surface treatment was necessary. Also the packets are more advantageous since the surface treatment will not spread through the cleaning attachment until wet. Additionally, Adams states that any type of fastener could be used to attach the cleaning attachment (col. 2, lines 40-47), and Zayas teaches that snaps, clips and hook and loop fastening means are interchangeable, it would have been obvious to modify Adams' fastening means so that hook and loop material is used to attach the cleaning attachment. The hook and loop material could either be located on the top surface of the carrier in the place of the existing clips or the hook and loop material could be located on the bottom surface of the carrier and when the packet is placed between the carrier and the cleaning

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attachment, the cleaning attachment would be connected to the carrier by the hook and loop material not covered by the packet. Additionally, it would have been obvious to modify Adams, Zafiroglu and Zayas' invention to reciprocate at least 3,000 cycles per minute as taught by Blaustein to achieve proper cleaning and scrubbing.

With regards to the limitation that the attachment is triangular shaped, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to make the attachment triangular because Applicant has not disclosed that a triangular shaped attachment provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with round, rectangular or triangular attachments because these shapes perform the same function of cleaning equally well. Therefore, it would have been obvious to one of ordinary skill in the art to modify Adams in view of Zafiroglu to obtain the invention as specified in claim 1.

**Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams (USPN 2590913), Zafiroglu (USPN 4820435), Zayas (USPN 5493749), Blaustein (USPN 6725490) further in view of Dickler (USPN 6037319).**

Adams, Zafiroglu, Zayas and Blaustein teach all the essential elements of the claimed invention however fails to teach that the surface treatment composition is water dissolvable (claim 2) and that the packet is made of polyvinyl alcohol (claim 3). Dickler teaches a liquid dispensing packet made from a water dissolvable material such as polyvinyl alcohol (col. 2, lines 64-66; col. 3, lines 1-7). It would have been obvious to use make the packages of treatment composition of Zafiroglu water dissolvable as taught by Dickler to eliminate waste and

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furthermore the user would not have to come in contact with any of the treatment composition whether when disposing of a non-dissolvable packet or when refilling a non-dissolvable packet, thus eliminating any injuries that may occur due to the cleaning solution. Also, refilling of a non-dissolvable packet could lead to cross contamination if refilling with a different cleaning solution.

**Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams, Zafiroglu, Zayas and Blaustein as applied to claim 1 above and further in view of Super (USPN 6493903).**

Adams, Zafiroglu, Zayas and Blaustein teach all the essential elements of the claimed invention however fail to teach a lamp located in the forward part of the housing. Super teaches a cleaning device comprising a headlamp. It would have been obvious to add a head light to Adams, Zafiroglu, Zayas and Blaustein's invention so that the area being cleaned can be illuminated to allow for a proper and thorough cleaning of the area.

**Claims 1, 5-6, 8 and 10-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siman (USPN 5701625) in view of Zafiroglu (USPN 4820435), Zayas (USPN 5493749) and Blaustein et al. (USPN 6725490) and further in view of Kasen et al. (USPN 5937475).**

With regards to claim 1, Siman teaches a portable powered cleaning device comprising a housing (1) and motor (3) mounted in the housing. The motor comprises a drive shaft (6), which is coupled to a carrier (27, 28). The carrier reciprocates with respect to the housing when the drive shaft is moved. There is a cleaning attachment (30) removably attached to the carrier.

With regards to claim 5, there is a rechargeable battery disposed in the housing for powering the motor (col. 4, lines 54-56).

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With regards to claim 6, there is a power switch (12) coupled between the battery and the motor (col. 2, lines 63-65).

With regards to claim 10, the cleaning attachment is made from cloth, sponge or bristles (32; col. 3, lines 50-55).

With regards to claims 11 and 12, the surface treatment composition is in liquid, gel or paste form and can be used to clean or polish (detergent and water; col. 4, lines 23-53).

With regards to claim 13, the surface treatment comprises surfactants and solvents (detergents and water).

With regards to claim 14, the carrier further comprises a substantially rigid body coupled to the drive shaft by a bearing (7).

With regards to claim 15, the carrier further comprises a plate attached to the bottom side of the carrier (not labeled, shown in figure 5a, as the horizontal plate located above 30 integral with 27 and 28).

Siman teaches all the essential elements of the claimed invention however fails to teach that the surface treatment composition is located in a separate packet and that the cleaning attachment is attached to the carrier by a hook and loop fastening means (claim 1). Siman also fails to teach that the carrier reciprocates between 3,000 and 10,000 cycles per minute (claim 1 and 8). Additionally, Siman fails to teach that a foam layer attached to the underside of the carrier plate (claim 16) and that the foam is attached to the carrier plate by hook and loop material (claims 17 and 18).

Zafiroglu teaches liquid dispensing packets containing liquid concentrate which can be placed insides sponges, or within an outer net fabric, or within an abrasive outer fabric (col. 3,



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lines 13-15) (claim 1). Zayas teaches a cleaning device which comprises a cleaning attachment attached to a carrier by many fastening means such as clips, snaps or hook and loop material (col. 3, lines 29-32) (claims 1, 17-18). Blaustein teaches a cleaning element with a cleaning attachment that reciprocates at 6,000 cycles per minute (col. 4, line 5) (claim 1 and 8).

It would have been obvious to replace the recess (15) with holding a surface treatment composition as taught by Siman with the water dissolvable liquid dispensing packets of Zafiroglu since it would be easier to refill the hand held scrubber when more surface treatment is necessary. Also the packets are more advantageous since the surface treatment will not spread through the cleaning attachment until wet. Additionally, it would have been obvious to modify Siman's fastening means (which are not disclosed) with a hook and loop material is used to attach the cleaning attachment as taught by Zayas so that once the cleaning attachment becomes used or worn it can be easily removed and replaced. The hook and loop material could be attached to the bottom surface of the carrier plate and when the packet is placed between the carrier plate and the cleaning attachment, the cleaning attachment would be connected to the carrier by the hook and loop material not covered by the packet. Additionally, it would have been obvious to modify Siman, Zafiroglu and Zayas' invention to reciprocate at least 3,000 cycles per minute as taught by Blaustein to achieve proper cleaning and scrubbing.

With regards to claim 16, Siman teaches using a sponge material for the cleaning attachment however does not explicitly state that the sponge is a foam material. It is known in the art that foam can be used in cleaning applications for cleaning and polishing. It would have been obvious to use foam as an alternative to the sponge since both have similar characteristics such as being absorptive and resilient.

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With regards to the limitation that the attachment is triangular shaped (claim 1), at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to make the attachment triangular because Applicant has not disclosed that a triangular shaped attachment provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with a round, rectangular or triangular attachment because these shapes perform the same function of cleaning equally well. Therefore, it would have been obvious to one of ordinary skill in the art to modify Siman to obtain the invention as specified in claim 1.

**Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siman (USPN 5701625), Zafiroglu (USPN 4820435), Zayas (USPN 5493749) and Blaustein (USPN 6725490) and further in view of Dickler (USPN 6037319).**

Siman, Zafiroglu, Zayas and Blaustein teaches all the essential elements of the claimed invention however fails to teach that the surface treatment composition is water dissolvable (claim 2) and that the packet is made of polyvinyl alcohol (claim 3). Dickler teaches a liquid dispensing packet made from a water dissolvable material such as polyvinyl alcohol (col. 2, lines 64-66; col. 3, lines 1-7). It would have been obvious to use make the packages of treatment composition of Zafiroglu water dissolvable as taught by Dickler to eliminate waste and furthermore the user would not have to come in contact with any of the treatment composition whether when disposing of a non-dissolvable packet or when refilling a non-dissolvable packet, thus eliminating any injuries that may occur due to the cleaning solution. Also, refilling of a non-dissolvable packet could lead to cross contamination if refilling with a different cleaning solution.

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siman (USPN 5701625), Zafiroglu (USPN 4820435), Zayas (USPN 5493749) and Blaustein (USPN 6725490) and further in view of Kasen et al. (USPN 5937475).**

Siman, Zafiroglu, Zayas and Blaustein teach all the essential elements of the claimed invention however fail to teach an interrupt switch. Kasen teaches an extractor with an interrupt switch (98) located between the motor and the source of electricity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Siman's cleaning machine to include an interrupt switch as taught by Kasen so that the cleaning attachment of Siman can alternate between reciprocation or no reciprocation without completely turning off the device. This would allow for providing only surface treatment composition to the cleaning surface at times when the cleaning attachment is not to be reciprocated (col. 4, lines 33-50).

**Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adams in view of Girardot et al. (USPN 6406206), Zayas and Blaustein.**

Adams teaches a portable powered cleaning device comprising a housing (12) and motor (26) mounted in the housing. The motor comprises a drive shaft (36), which is coupled to a carrier (40). The carrier reciprocates with respect to the housing when the drive shaft is moved. There is a cleaning attachment (52) removably attached to the carrier and recesses filled with surface treatment (56) located between the cleaning attachment and the carrier.

Adams teaches all the essential elements of the claimed invention however fails to teach that the surface treatment composition is located in a separate packet wherein the packet is perforated and includes a peel off layer covering the perforations and also that the cleaning

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attachment is attached to the carrier by a hook and loop fastener connection. Adams also fails to teach that the carrier reciprocates at at least 3,000 cycles per minute.

Girardot teaches a cleaning packet comprising a surface treatment composition (60) such as a cleaning agent (col. 4, lines 6-9) having a peel off layer (40) covering perforations (30).

Zayas teaches a cleaning device which comprises a cleaning attachment attached to a carrier by many fastening means such as clips, snaps or hook and loop material (col. 3, lines 29-32).

Blaustein teaches a cleaning element with a cleaning attachment that reciprocates at 6,000 cycles per minute (col. 4, line 5).

It would have been obvious to replace the recesses filled with the surface treatment composition as taught by Adams with the packets as taught by Girardot. Using packets with a peel off surface aids in containment of the surface treatment composition until the packet is ready to be used (col. 1, lines 53-57). This will increase the shelf life of the packets.

Additionally, Adams states that any type of fastener could be used to attach the cleaning attachment (col. 2, lines 40-47), and Zayas teaches that snaps, clips and hook and loop fastening means are interchangeable, it would have been obvious to modify Adams' fastening means so that hook and loop material is used to attach the cleaning attachment. The hook and loop material could either be located on the top surface of the carrier in the place of the existing clips or the hook and loop material could be located on the bottom surface of the carrier and when the packet is placed between the carrier and the cleaning attachment, the cleaning attachment would be connected to the carrier by the hook and loop material not covered by the packet.

Additionally, it would have been obvious to modify Adams, Girardot and Zayas' invention to

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reciprocate at at least 3,000 cycles per minute as taught by Blaustein to achieve proper cleaning and scrubbing.

**Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Siman, Zafiroglu, Zayas and Blaustein as applied to claim 1 above and further in view of Super (USPN 6493903).**

Siman, Zafiroglu, Zayas and Blaustein teach all the essential elements of the claimed invention however fail to teach a lamp located in the forward part of the housing. Super teaches a cleaning device comprising a headlamp. It would have been obvious to add a head light to Siman, Zafiroglu, Zayas and Blaustein's invention so that the area being cleaned can be illuminated to allow for a proper and thorough cleaning of the area.

#### ***Response to Arguments***

Applicant's arguments filed 5/3/06, with respect to the James reference, have been fully considered and are persuasive, the rejections with regards to the James reference are withdrawn.

Applicant's arguments filed 5/3/06, with respect to the Adams and Zayas reference, have been fully considered and are not persuasive.

The applicant argues that there would be too little attachment on Adams for the hook and loops as taught by Zayas between the carrier and the cleaning attachment when the packet is placed in the middle. The examiner would like to point out that the hook and loop material could be located on a top portion of the carrier and the cleaning attachment could be wrapped around the carrier plate. This embodiment would allow for enough attachment between the two elements. Additionally, the hook and loop material could be located on the bottom surface of the carrier (as shown in the present invention) and there would still be enough attachment between

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the two elements when the packet is placed in the middle because the packet is to replace the existing recesses. As shown in figure 4 of Adams, the recesses are only located in the middle of the carrier. Therefore, the packet would be located in approximately the same location as the recesses. There is clearly room surrounding the recesses, and in turn the packet, to connect the cleaning attachment to the carrier. The applicant states there would be "too little attachment area" however, it is not explicitly disclosed as to what is the correct amount of attachment area. It is unclear what the determining factor is between too little and the correct amount. Therefore, as long as there is an attachment area, the references meet the claim limitations.

The applicant also argues that the advantage of the triangular shape of the cleaning attachment is that it cleans corners of a tub or a shower. The applicant states that round attachments would not fit in to the corners as well as a triangular shaped. The examiner would like to point out that a rectangular shaped attachment would fit into a corner and clean it equally as well as a triangular attachment and therefore, the triangle shape does not possess an advantage over a rectangular shaped attachment. Additionally, the claims do not state what the cleaning device is to be used for. By stating that the device is to be used for cleaning corners is an intended use limitation and would hold no patentable weight. Therefore, since the device could be used to clean walls as well as corners, it would have been obvious to modify the shape of the references to be triangular since it is expected that the Applicant's invention would perform equally well with a round, rectangular or triangular attachment when cleaning walls because these shapes perform the same function of cleaning equally well.

### ***Conclusion***

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SLB  
8/9/06



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